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COMPLETION REPORT INVESTIGATIVE SAMPLING AT SOLID WASTE MANAGEMENT
UNIT 39 (SWMU39) FOR VOCs WITH TRANSMITTAL CNC CHARLESTON SC
9/9/1999
CNC CHARLESTON



COMPLETION REPORT

INVESTIGATIVE SAMPLING
AT SWMU 39 FOR VOCs
NAVAL BASE CHARLESTON
CHARLESTON, SC



Prepared for:

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
CHARLESTON SC



Prepared by:

Supervisor of Shipbuilding, Conversion and Repair,
USN, (SUPSHIP) Portsmouth Va.,
Environmental Detachment Charleston, S.C.
1899 North Hobson Ave.
North Charleston, SC 29405-2106

August 19, 1999



DEPARTMENT OF THE NAVY
SUPERVISOR OF SHIPBUILDING, CONVERSION AND REPAIR, USN
PORTSMOUTH, VIRGINIA, ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE, BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2106

IN REPLY REFER TO:

Ser 666
SEP 09 1999

MEMORANDUM

From: Director, Supervisor of Shipbuilding, Conversion and Repair, USN, Portsmouth, Va.
Environmental Detachment Charleston, SC (SPORTENVDETCHASN)
To: Southern Division Naval Facilities Engineering Command
(Code 1876, Tony Hunt)

Subj: SOLID WASTE MANAGEMENT UNIT (SWMU) 39 PASSIVE DIFFUSION VAPOR
SAMPLING.

1. The Environmental Detachment Charleston (DET), was tasked by Southern Division Naval Facilities Engineering Command (SDIV) to perform passive VOC sampling in the marsh west of SWMU 39.
2. Passive vapor diffusion sampling was performed from 7 July 1999 to 21 July 1999. Enclosed is a report on the sample results.
3. Questions should be addressed to Jed Heames, Interim Measures Work Leader at (843) 743-6306 ext. 123.

Respectfully,

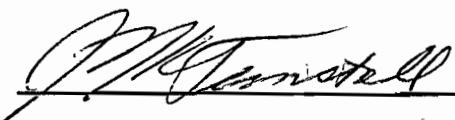
E.R. Dearhart
E.R. Dearhart

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File

SWMU 39 SAMPLING REPORT

CHARLESTON NAVAL SHIPYARD
CHARLESTON, SOUTH CAROLINA

Engineering Branch Head:



Date: 9-7-99

Prepared By:



Date: 9-7-99

**SAMPLING PERFORMED BY:
ENVIRONMENTAL DETACHMENT CHARLESTON**
1899 NORTH HOBSON AVENUE
NORTH CHARLESTON, SC 29405
(843) 743-6777

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- A. SITE FIGURES & AERIAL PHOTO/SHALLOW GROUNDWATER FLOW
- B. LABORATORY ANALYTICAL SHEETS

INTRODUCTION:

Southern Division Naval Facilities Engineering Command tasked the Environmental Detachment Charleston (EDC) to perform passive Volatile Organic Compound (VOC) sampling at Solid Waste Management Unit (SWMU) 39 to determine if VOCs, specifically chlorinated solvents were at detectable levels in the wetland area located northwest of SWMU 39.

BACKGROUND:

SWMU 39 is located in Zone A of the Charleston Naval Complex. SWMU 39 is the former storage area for petroleum, oil, and lubricants (POL). The Hess Oil Co. tank farm is adjacent to the north property line and a wetland lies approximately 500 feet down gradient to the west. The Resource Conservation Recovery Act (RCRA) Facility Investigation (RFI) Report dated August 7, 1998 identified several contaminants in shallow groundwater at SWMU 39; however, the primary contaminants of concern in shallow groundwater are petroleum products and chlorinated solvents. The chlorinated solvents were observed over a wide area in the northwestern portion of Zone A. The RFI Work Plan provides computer generated contour maps that indicate the direction of groundwater flow could transport the chlorinated solvent plume into or beneath the wetland (marsh) to the west of SWMU 39.

The marsh west of SWMU 39 is characteristic of tidal areas of the Charleston region which contains salt marsh grass ranging in heights from 2 to 6 feet. The soil is of a typical marsh clay- dark gray to black, silty with a high organic content and characteristic sulfur smell. The tides rotate on an approximate 6 hour cycle and the samplers are covered with water on an extreme high tide.

OBJECTIVE:

The objective of the investigative sampling was to determine what degree if any the chlorinated solvent plume has spread beyond the Charleston Naval Complex property line and into the wetlands.

SAMPLING DESIGN:

EDC utilized diffusion samplers as the method to gather analytical data. The approach and equipment used is similar to that used by Dr. Don Vroblesky, a research with the U.S.G.S. in Columbia S.C.. This method utilizes polyethylene (plastic) as semi-permeable membranes to allow for the passive diffusion of VOCs into the sampling container. Two different sampling devices were used depending on the media of interest. The vapor sampler consists of an uncapped empty 40 ml vial with cellophane wrapping secured over the opening. The diffusion (aqueous) sampler is a sealed plastic sleeve containing about 100 ml of pure water. Theoretically, as VOCs in ground water pass through the area,

volatile compounds diffuse through the polyethylene sheet until an equilibrium state is reached. The vapor collectors are then retrieved for analysis. The 40 ml vapor samplers are immediately sealed with a Teflon septum cap. The Teflon septum caps allow the gas vapors inside to be extracted for analysis. The sleeve of water is directly transferred into a 40 ml vial for analysis.

Prior to installation of the samplers EDC performed field testing of the diffusion samplers to test the sampling methodology and to ensure the analytical laboratory could analyze vapor samplers. EDC placed two vapor collectors and one water sleeve approximately 10 feet from a location known to contain chlorobenzene (GEL 15 Area, sample location 020GDF02). The sample results showed chlorobenzene present; however, at levels 100 times less than EnSafe's data. The difference in concentration levels may have resulted due to the differences in sampling depths. EnSafe's samplers were approximately 4 to 5 feet in depth and EDC's were 1½ feet below ground surface. Concurrently, EDC ran a bench test placing both types of samplers in a sealed jar with solvents that contained volatile organics, specifically Tetrachloroethylene and Xylenes. Analytical results recovered these contaminants in both types of samplers.

Twenty six sample locations were selected in the marsh area west of SWMU 39 at approximately 50 foot intervals as shown on Figure 1 of Appendix A. All sample locations contained one 40 ml vapor sampler. At ten of the twenty six sample locations sleeves of water were inserted to compare the sampling methods and results. The samples were then collected and transported to a certified laboratory for Appendix IX volatile analysis (Sample method SW-846 8260B).

IMPLEMENTATION:

EDC installed twenty six samplers on the morning of 7 July 1999 during low tide. The samplers were place approximately 1.5 feet below ground surface in the marsh for two weeks. Two of the twenty six samplers were placed in a ditch that runs between the Charleston Naval Complex property line (fence) and the railroad spur. The other twenty four samplers were place in the marsh to the west of SWMU 39 (See figure 1 of Appendix A for sample locations). The samplers were collected on the morning of 21 July 1999 during low tide. Of the twenty six samplers, two samplers (#3 and #26) were not recovered. Sample results are shown on Table 1 for constituents that exceeded any detection limits. Analytical sheets are in Appendix B.

SAMPLING SUMMARY:

Table 1 on the following page lists the sample identification numbers. VOCs that exceeded any detection limit are shaded. Sample identification numbers 1 – 25 (vapor vials) are also the sample locations shown on figure 1 of Appendix A.

Each location contained a 40 ml vial for vapor analysis. Sample identification numbers 27 – 36 were sleeves of water inserted along with the 40 ml vapor vials at random locations for data comparison. The following number sets show samples identification numbers that were at the same location, or first digit of each set. (1 & 27), (4 & 28), (8 & 29), (12 & 30), (14 & 31), (15 & 32), (18 & 33), (20 & 34), (23 & 35), (25 & 36). Sample 37 was the Field Trip Blank.

Sampling results identified Acetone, Carbon Disulfide, Methylene Chloride, Toluene, Allyl Chloride, 1,2-cis- Dichloroethylene, Trichloroethylene and 2-Butanone as constituents that were detected above detection limits (Table 1).

Acetone, Methylene Chloride and 2-Butanone were identified as lab artifacts based on the laboratory Method Blank QC summary reports at the end of Appendix B. The QC631569 Method Blank 154236 is for samples 1 - 25. QC633090 Method Blank 154614 is for samples 27- 36. Although Acetone was not detected in the Method Blank for samples 1 – 25, lab artifacts should still be considered a possible source for Acetone.

Carbon Disulfide also appeared in over 50% percent of the samples. Carbon Disulfide has many industrial uses; however, Carbon Disulfide occurs naturally. This is mostly due to the action of microorganisms living in sediments found on the sea floor and in marshes (U.S. EPA, Office of Pollution Prevention and Toxics, Chemical Fact Sheet EPA 749-F-94-008, August 1994). This is likely the source of Carbon Disulfide identified in the sample analyses.

Toluene also showed up in over 50% of the sample results. The Toluene detection's/locations had no particular pattern (See Figure 2 of Appendix A for locations). Toluene is also a recognized lab artifact but was not detected in the laboratory Method Blanks. Based on the area's history these detection's should be considered valid sample data.

Trace amounts of **chlorinated solvents** were detected in vapor samplers 16, 18 and 20 (See figure 3 of Appendix A for locations). It should be noted this area is a convergence for groundwater flow shown by the ground water contour/aerial map provided by EnSafe (following figure 3 of Appendix A).

SAMPLE RESULTS:Results are in micrograms/liter ($\mu\text{g/l}$) or ppb

ND – non-detects

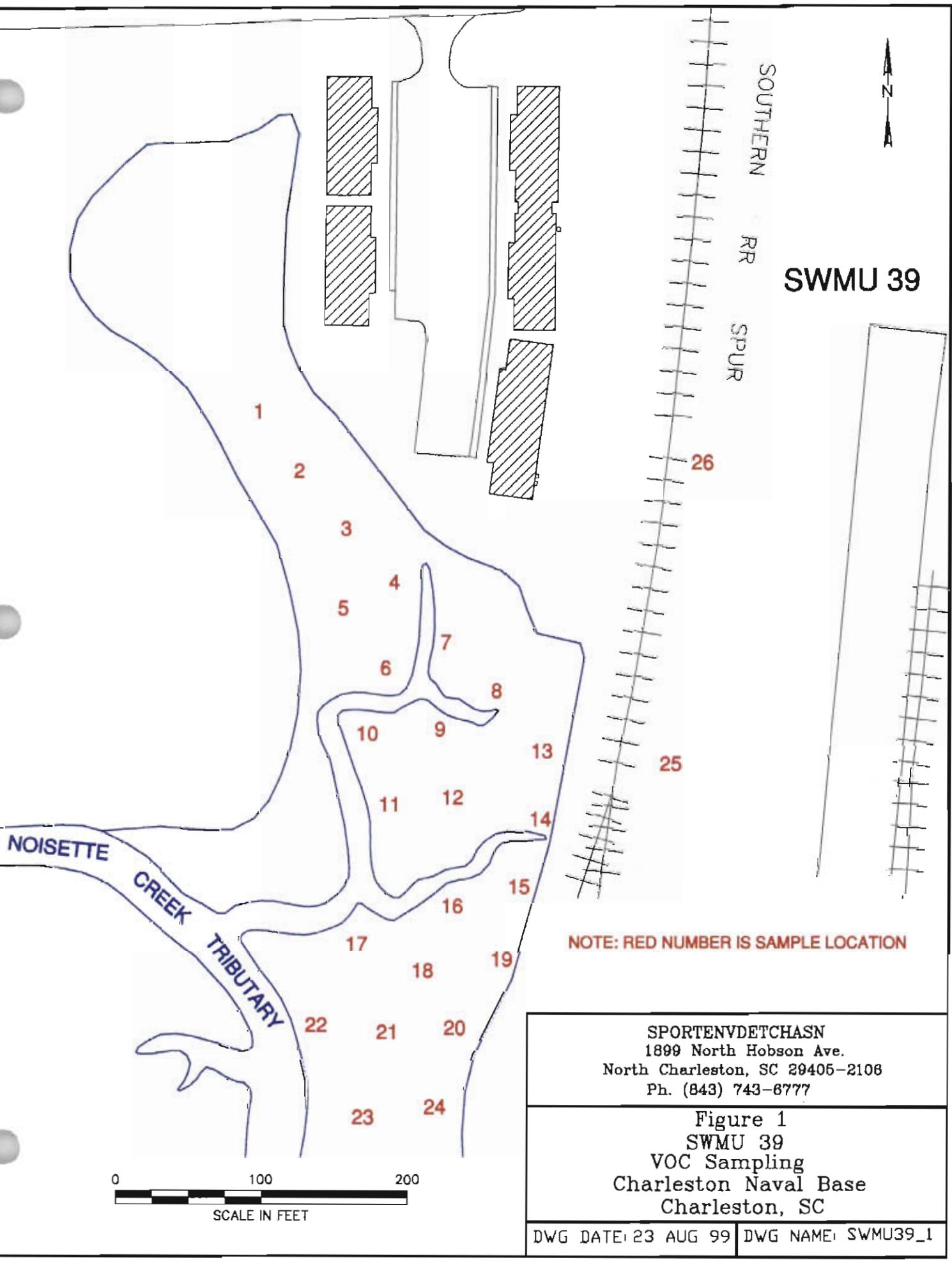
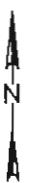
J – indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL)

TABLE 1

SAMPLE ID #	Acetone	Carbon Disulfide	Methylene Chloride	Toluene	Allyl Chloride	1,2-cis-Di chloro ethylene	Trichloro ethylene	1,1-Di chloro ethane	2-Butanone
1-vapor	ND	ND	ND	1.89 J	ND	ND	ND	ND	ND
2-vapor	ND	ND	1.45 J	2.93 J	ND	ND	ND	ND	ND
3-vapor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4-vapor	4.72 J	ND	2.51 J	49.6 J	2.72 J	ND	ND	ND	ND
5-vapor	3.77 J	ND	ND	ND	ND	ND	ND	ND	ND
6-vapor	4.16 J	2.64 J	ND	1.04 J	ND	ND	ND	ND	ND
7-vapor	3.97 J	2.79 J	ND	ND	ND	ND	ND	ND	ND
8-vapor	6.05 J	3.22 J	ND	1.26 J	ND	ND	ND	ND	ND
9-vapor	ND	ND	ND	ND	ND	ND	ND	ND	ND
10-vapor	5.15 J	3.62 J	2.23 J	ND	ND	ND	ND	ND	ND
11-vapor	8.66 J	ND	ND	2.65 J	ND	ND	ND	ND	ND
12-vapor	8.84 J	3.51 J	ND	7.78 J	ND	ND	ND	ND	ND
13-vapor	11.2 J	3.0 J	ND	0.60 J	ND	ND	ND	ND	ND
14-vapor	15.7 J	3.66 J	ND	ND	ND	ND	ND	ND	ND
15-vapor	ND	2.90 J	ND	10.570 J	ND	ND	ND	ND	ND
16-vapor	5.84 J	3.22 J	ND	ND	ND	15.85 J	ND	ND	ND
17-vapor	4.09 J	2.70 J	ND	ND	ND	ND	ND	ND	ND
18-vapor	5.59 J	3.95 J	ND	ND	ND	0.770 J	ND	ND	ND
19-vapor	6.39 J	ND	ND	32.3 J	ND	ND	ND	ND	ND
20-vapor	24.1 J	ND	ND	107 J	ND	ND	ND	ND	ND
21-vapor	24.98 J	ND	ND	36.1 J	ND	13.19 J	0.930 J	ND	ND
22-vapor	ND	ND	ND	ND	ND	ND	ND	ND	ND
23-vapor	ND	3.24 J	ND	30.0 J	ND	ND	ND	ND	ND
24-vapor	ND	3.02 J	ND	6.18 J	ND	ND	ND	ND	ND
25-vapor	ND	ND	ND	ND	ND	ND	ND	ND	ND
26-liquid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
27-liquid	4.51 J	ND	ND	ND	ND	ND	ND	0.630 J	ND
28-liquid	7.29 J	29.6 J	ND	2.49 J	ND	ND	ND	ND	ND
29-liquid	10.7 J	28.2 J	ND	35.8 J	ND	ND	ND	ND	32.9 J
30-liquid	4.62 J	10.9 J	ND	3.55 J	ND	ND	ND	ND	ND
31-liquid	11.27 J	ND	ND	86.9 J	ND	ND	ND	ND	ND
32-liquid	3.91 J	7.03 J	ND	10.550 J	ND	ND	ND	ND	ND
33-liquid	ND	8.74 J	ND	ND	ND	ND	ND	ND	ND
34-liquid	5.77 J	14.8 J	ND	7.8 J	ND	ND	ND	ND	ND
35-liquid	4.18 J	9.33 J	ND	ND	ND	ND	ND	ND	ND
36-liquid	16.01 J	9.71 J	ND	3.45 J	ND	ND	ND	ND	5.98 J
37 Trip Blank	ND	ND	ND	ND	ND	ND	ND	ND	ND

SWMU 39

SOUTHERN
RR SPUR



SWMU 39

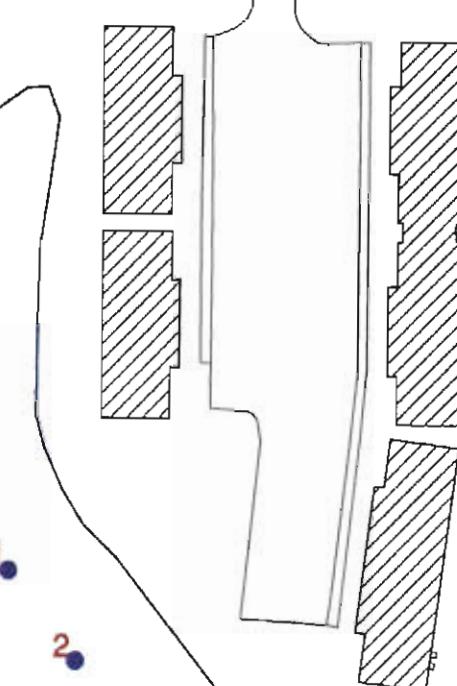
SOUTHERN
RR
SPUR

26

25

NOISETTE
CREEK
TRIBUTARY

0 100 200
SCALE IN FEET



LEGEND
RED NUMBER IS SAMPLE LOCATION
● INDICATES TOLUENE DETECTION

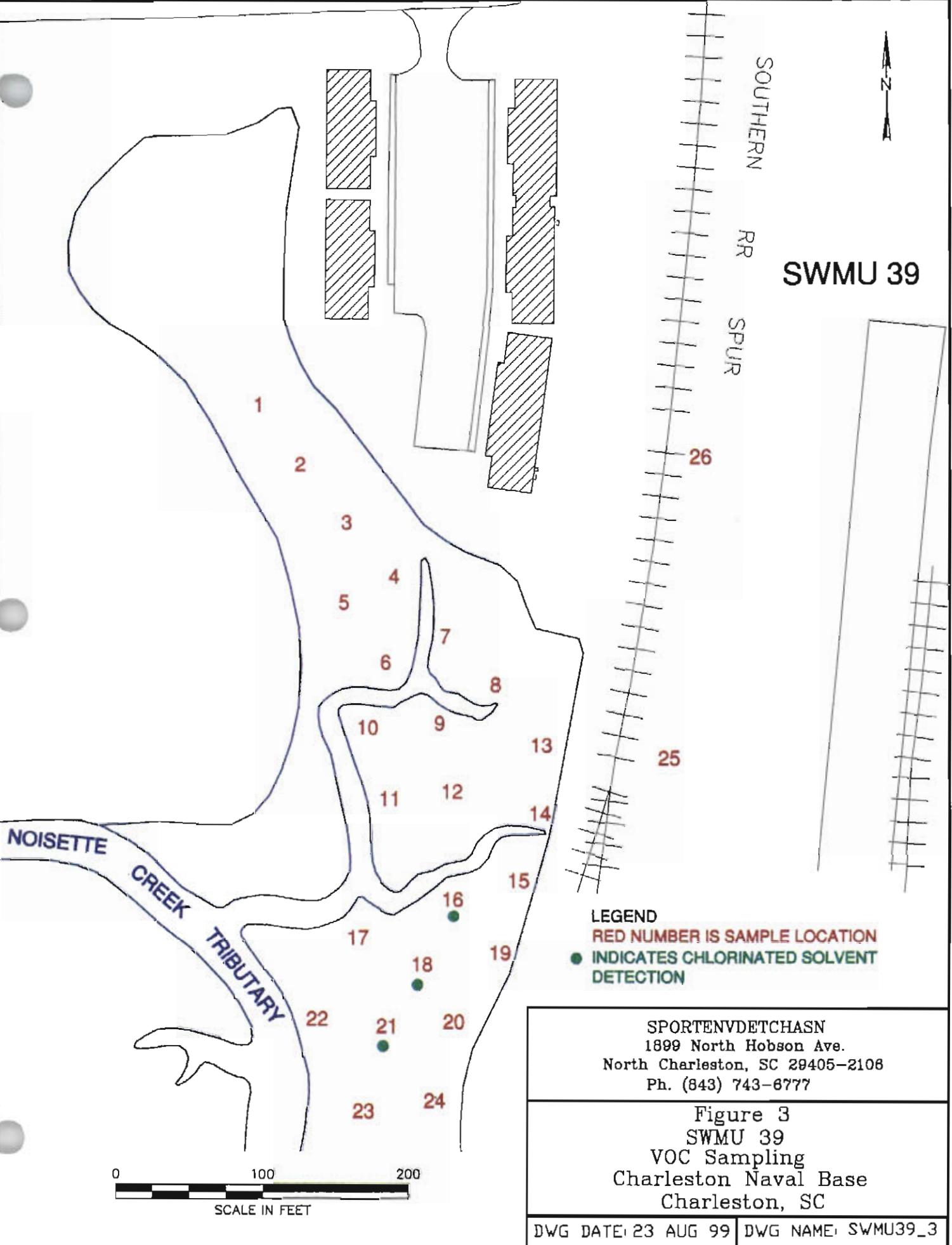
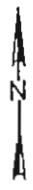
SPORTENVDETCHASN
1899 North Hobson Ave.
North Charleston, SC 29405-2106
Ph. (843) 743-6777

Figure 2
SWMU 39
VOC Sampling
Charleston Naval Base
Charleston, SC

DWG DATE: 23 AUG 99 DWG NAME: SWMU39_2

SWMU 39

SOUTHERN
RR
SPUR







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Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 3 of 3

Sample ID 99SPORT0235-21

Surrogate Recovery	Test	Percent %	Acceptable Limits
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M = Method	Method-Description
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M 1	EPA 8260B
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Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

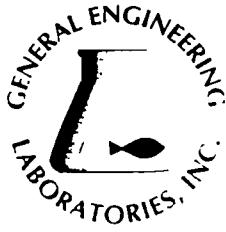
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed
in accordance with General Engineering Laboratories
standard operating procedures. Please direct
any questions to your Project Manager, Elise Hanson at 843-556-8171.

E. Hanson
Reviewed By



GENERAL ENGINEERING LABORATORIES

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SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 1 of 3

Sample ID : 99SPORT0235-22
Lab ID : 9907751-21
Matrix : GroundH2O
Date Collected : 07/22/99
Date Received : 07/22/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1358	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	U	ND	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	U	ND	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

P O Box 30712 • Charleston, SC 29417 • 2040 Savage Road • 29407

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9907751-21



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Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 2 of 3

Sample ID : 99SPORT0235-22

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1358	154236	I
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	U	ND	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	97.0	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	101.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	97.6	(73.0 - 122.)

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 3 of 3

Sample ID : 99SPORT0235-22			
Surrogate Recovery	Test	Percent %	Acceptable Limits
M = Method			Method-Description
M 1			EPA 8260B

Notes:

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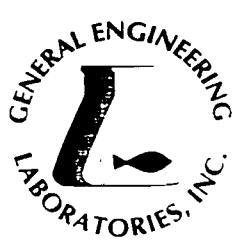
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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

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Page 1 of 3

Sample ID : 99SPORT0235-23
Lab ID : 9907751-22
Matrix : GroundH2O
Date Collected : 07/22/99
Date Received : 07/22/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
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1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	U	ND	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	J	3.24	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 1 of 3

Sample ID	:	99SPORT0235-01
Lab ID	:	9907751-01
Matrix	:	GroundH ₂ O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/23/99	1912	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2- <i>cis</i> -Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2- <i>trans</i> -Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	U	ND	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	U	ND	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/23/99	1912	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		1.89	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	93.8	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	102.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	98.0	(73.0 - 122.)

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cc: NPWC00197

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Sample ID	: 99SPORT0235-01		
Surrogate Recovery	Test	Percent %	Acceptable Limits
M = Method			Method-Description
M I			EPA 8260B

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed
in accordance with General Engineering Laboratories
standard operating procedures. Please direct
any questions to your Project Manager, Elise Hanson at 843-556-8171.

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Sample ID : 99SPORT0235-24
Lab ID : 9907751-23
Matrix : GroundH2O
Date Collected : 07/22/99
Date Received : 07/22/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1558	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	U	ND	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	J	3.02	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1558	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		6.18	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	97.9	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	103.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	101.	(73.0 - 122.)

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Page 3 of 3

Sample ID	: 99SPORT0235-24		
Surrogate Recovery	Test	Percent %	Acceptable Limits

M = Method	Method-Description
M 1	EPA 8260B

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed
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Sample ID	:	99SPORT0235-25
Lab ID	:	9907751-24
Matrix	:	GroundH ₂ O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1658	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	U	ND	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	U	ND	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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cc: NPWC00197

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Page 2 of 3

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1658	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	U	ND	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	94.9	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	102.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	97.0	(73.0 - 122.)

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Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc. NPWC00197

Report Date: August 02, 1999

Page 3 of 3

Sample ID : 99SPORT0235-25

Surrogate Recovery	Test	Percent %	Acceptable Limits
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M = Method	Method-Description		
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M 1	EPA 8260B		
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Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed
in accordance with General Engineering Laboratories
standard operating procedures. Please direct
any questions to your Project Manager, Elise Hanson at 843-556-8171.


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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 1 of 3

Sample ID : 99SPORT0235-27
Lab ID : 9907751-26
Matrix : GroundH₂O
Date Collected : 07/22/99
Date Received : 07/22/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1.1.1.2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	1938	154614	1
1.1.1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1.1.2.2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1.1.2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1.1-Dichloroethane	J	0.630	0.400	1.00	ug/l	1.0					
1.1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1.2.3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1.2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1.2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1.2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1.2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1.2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1.2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1.2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	J	4.51	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	U	ND	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 2 of 3

Sample ID · 99SPORT0235-27

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	1938	154614	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	U	ND	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	89.6	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	92.3	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	91.8	(73.0 - 122.)

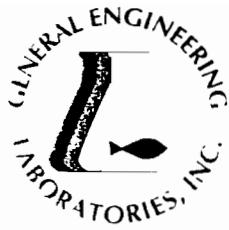
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Project Description: SUPSHIP-Portsmouth Detachment

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Report Date: August 02, 1999

Page 3 of 3

Sample ID	99SPORT0235-27		
Surrogate Recovery	Test	Percent %	Acceptable Limits

M = Method

Method-Description

M 1 EPA 8260B

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

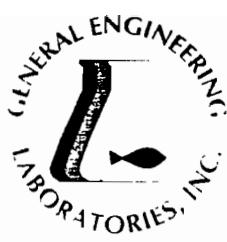
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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E. Hanson
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Contact: Mr. Bill Hiers
Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 1 of 3

Sample ID	: 99SPORT0235-28
Lab ID	: 9907751-27
Matrix	: GroundH ₂ O
Date Collected	: 07/22/99
Date Received	: 07/22/99
Priority	: Routine
Collector	: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2006	154614	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone		7.29	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide		29.6	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Project Description: SUPSHIP-Portsmouth Detachment

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Report Date: August 02, 1999

Page 2 of 3

Sample ID		: 99SPORT0235-28									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2006	154614	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		2.49	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

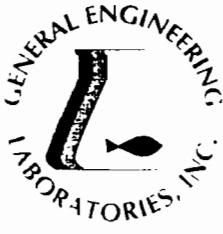
Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	85.4	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	90.5	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	95.7	(73.0 - 122.)

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cc: NPWC00197

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Page 3 of 3

Sample ID : 99SPORT0235-28

Surrogate Recovery	Test	Percent %	Acceptable Limits
--------------------	------	-----------	-------------------

M = Method	Method-Description
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M 1	EPA 8260B
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Notes:

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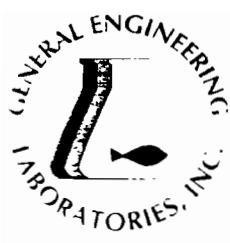
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

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Project Description: SUPSHIP-Portsmouth Detachment

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Sample ID	:	99SPORT0235-29
Lab ID	:	9907751-28
Matrix	:	GroundH ₂ O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2033	154614	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone		32.9	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone		10.7	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide		28.2	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Page 2 of 3

Sample ID		99SPORT0235-29									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2033	154614	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		35.8	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	81.9	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	90.5	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	95.8	(73.0 - 122.)

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SUPSHIP-Portsmouth Detachment-Env.
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North Charleston, South Carolina 29405-2106
Contact: Mr. Bill Hiers
Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 3 of 3

Sample ID	: 99SPORT0235-29		
Surrogate Recovery	Test	Percent %	Acceptable Limits
M = Method			Method-Description
M 1			EPA 8260B

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

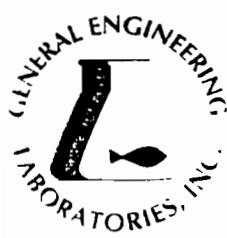
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed
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standard operating procedures. Please direct
any questions to your Project Manager, Elise Hanson at 843-556-8171.

Elise Hanson
Reviewed By



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Contact: Mr. Bill Hiers
Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 1 of 3

Sample ID : 99SPORT0235-30
Lab ID : 9907751-29
Matrix : GroundH2O
Date Collected : 07/22/99
Date Received : 07/22/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2101	154614	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	J	4.62	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide		10.9	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Contact: Mr. Bill Hiers

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cc: NPWC00197

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Page 2 of 3

Sample ID		99SPORT0235-30									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2101	154614	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		3.55	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	85.6	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	90.2	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	95.3	(73.0 - 122.)

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Page 3 of 3

Sample ID	. 99SPORT0235-30		
Surrogate Recovery	Test	Percent %	Acceptable Limits
M = Method			Method-Description
M 1	EPA 8260B		

Notes:

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ND indicates that the analyte was not detected at a concentration greater than the detection limit.

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Elise Hanson
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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

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Sample ID	:	99SPORT0235-31
Lab ID	:	9907751-30
Matrix	:	GroundH ₂ O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2129	154614	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone		12.7	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	U	ND	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

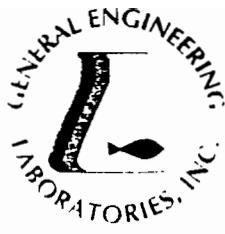
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Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2129	154614	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		86.9	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

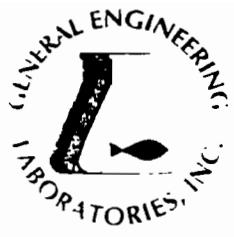
Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	85.4	(73.0 - 129.)
tribromofluoromethane	APP 9 VOA-8260B	92.3	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	95.9	(73.0 - 122.)

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Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 3 of 3

Sample ID	: 99SPORT0235-31		
Surrogate Recovery	Test	Percent %	Acceptable Limits

M = Method	Method-Description
M 1	EPA 8260B

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

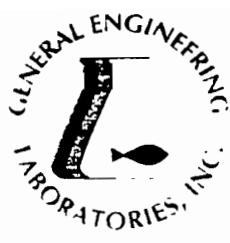
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

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Page 1 of 3

Sample ID	:	99SPORT0235-32
Lab ID	:	9907751-31
Matrix	:	GroundH ₂ O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2157	154614	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	J	3.91	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide		7.03	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Sample ID		: 99SPORT0235-32									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2157	154614	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	J	0.550	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromo fluoro benzene	APP 9 VOA-8260B	79.7	(73.0 - 129.)
Dibromo fluoro methane	APP 9 VOA-8260B	91.3	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	96.1	(73.0 - 122.)

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North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 3 of 3

Sample ID	: 99SPORT0235-32		
Surrogate Recovery	Test	Percent%	Acceptable Limits

M = Method

Method-Description

M I EPA 8260B

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

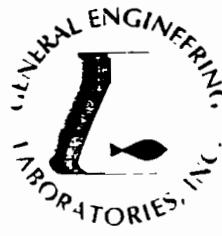
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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standard operating procedures. Please direct
any questions to your Project Manager, Elise Hanson at 843-556-8171.

Elise Hanson
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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 1 of 3

Sample ID	:	99SPORT0235-33
Lab ID	:	9907751-32
Matrix	:	GroundH2O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2224	154614	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	U	ND	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide		8.74		1.80	5.00	ug/l	1.0				
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 2 of 3

Sample ID		.99SPORT0235-33									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2224	154614	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	U	ND	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
BromoFluorobenzene	APP 9 VOA-8260B	78.6	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	90.4	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	96.6	(73.0 - 122.)

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Page 3 of 3

Sample ID : 99SPORT0235-33

Surrogate Recovery	Test	Percent %	Acceptable Limits
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M = Method

M 1 EPA 8260B

Notes:

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Contact: Mr. Bill Hiers

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Page 1 of 3

Sample ID : 99SPORT0235-34
Lab ID : 9907751-33
Matrix : GroundH₂O
Date Collected : 07/22/99
Date Received : 07/22/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2252	154614	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone		5.77	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide		14.8	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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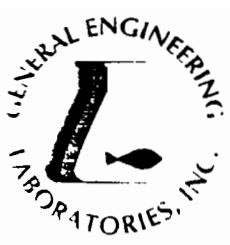
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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 2 of 3

Sample ID		: 99SPORT0235-34									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2252	154614	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		7.80	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	80.7	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	91.0	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	95.7	(73.0 - 122.)

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Page 3 of 3

Sample ID : 99SPORT0235-34

Surrogate Recovery	Test	Percent %	Acceptable Limits
--------------------	------	-----------	-------------------

M = Method	Method-Description
------------	--------------------

M 1	EPA 8260B
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Notes:

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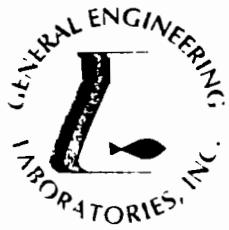
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

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Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 1 of 3

Sample ID	:	99SPORT0235-35
Lab ID	:	9907751-34
Matrix	:	GroundH ₂ O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2320	154614	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	J	4.18	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide		9.33	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Sample ID : 99SPORT0235-35

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2320	154614	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	U	ND	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

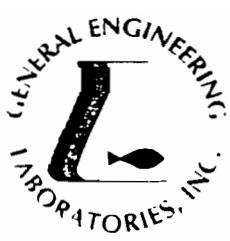
Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	82.4	(73.0 - 129.)
Dibromoifluoromethane	APP 9 VOA-8260B	92.6	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	96.4	(73.0 - 122.)

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1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 3 of 3

Sample ID	: 99SPORT0235-35		
Surrogate Recovery	Test	Percent %	Acceptable Limits
M = Method			Method-Description
M 1		EPA 8260B	

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

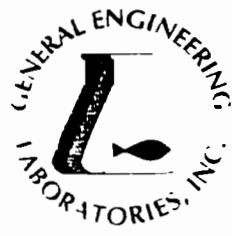
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed
in accordance with General Engineering Laboratories
standard operating procedures. Please direct
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Project Description: SUPSHIP-Portsmouth Detachment

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Page 1 of 3

Sample ID : 99SPORT0235-36
Lab ID : 9907751-35
Matrix : GroundH₂O
Date Collected : 07/22/99
Date Received : 07/22/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2349	154614	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	J	5.98	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone		6.01	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide		9.71	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Project Description: SUPSHIP-Portsmouth Detachment

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Report Date: August 02, 1999

Page 2 of 3

Sample ID		99SPORT0235-36									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	2349	154614	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		3.45	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

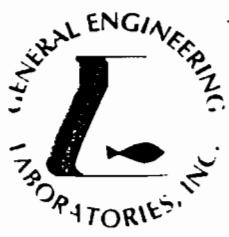
Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	83.1	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	92.2	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	95.9	(73.0 - 122.)

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Page 3 of 3

Sample ID : 99SPORT0235-36

Surrogate Recovery	Test	Percent %	Acceptable Limits
--------------------	------	-----------	-------------------

M = Method	Method-Description
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M 1	EPA 8260B
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Notes:

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ND indicates that the analyte was not detected at a concentration greater than the detection limit.

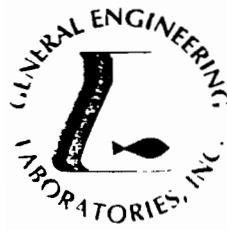
J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

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Contact: Mr. Bill Hiers
Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 1 of 3

Sample ID	: 99SPORT0235-37
Lab ID	: 9907751-36
Matrix	: GroundH ₂ O
Date Collected	: 07/22/99
Date Received	: 07/22/99
Priority	: Routine
Collector	: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	1719	154614	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	U	ND	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	U	ND	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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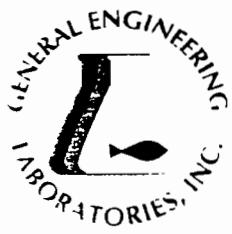
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Project Description: SUPSHIP-Portsmouth Detachment

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Page 2 of 3

Sample ID : 99SPORT0235-37

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	JEB	07/28/99	1719	154614	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	U	ND	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	100.	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	94.2	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	100.	(73.0 - 122.)

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 3 of 3

Sample ID : 99SPORT0235-37

Surrogate Recovery	Test	Percent %	Acceptable Limits
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M = Method	Method-Description
------------	--------------------

M 1	EPA 8260B
-----	-----------

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

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any questions to your Project Manager, Elise Hanson at 843-556-8171.

Elise Hanson

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QC Summary Report

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Lab. Sample ID: 9907751%

Report Date: August 02, 1999

Page 1 of 6

Sample/Parameter	Type	Batch	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Analyst	Date	Time
Volatile Organics													
QC631569		BLANK	154236										
1,1-Dichloroethylene					0.00		ug/l					TCL	07/23/99 1842
Benzene					0.00		ug/l						
Chlorobenzene					0.00		ug/l						
Toluene					0.00		ug/l						
Trichloroethylene					0.00		ug/l						
*Bromofluorobenzene							ug/l		92.3	(73.0 - 129.)			
*Dibromofluoromethane							ug/l		97.8	(66.0 - 117.)			
*Toluene-d8							ug/l		95.2	(73.0 - 122.)			
1,1,1,2-Tetrachloroethane					0.00		ug/l						
1,1,1-Trichloroethane					0.00		ug/l						
1,1,2,2-Tetrachloroethane					0.00		ug/l						
1,1,2-Trichloroethane					0.00		ug/l						
1,1-Dichloroethane					0.00		ug/l						
1,2,3-Trichloropropane					0.00		ug/l						
1,2-Dibromo-3-chloropropane					0.00		ug/l						
1,2-Dibromoethane					0.00		ug/l						
1,2-Dichlorobenzene					0.00		ug/l						
1,2-Dichloroethane					0.00		ug/l						
1,2-Dichloropropane					0.00		ug/l						
1,2-cis-Dichloroethylene					0.00		ug/l						
1,2-trans-Dichloroethylene					0.00		ug/l						
2-Butanone					0.00		ug/l						
2-Hexanone					0.00		ug/l						
4-Methyl-2-pentanone					0.00		ug/l						
Acetone					0.00		ug/l						
Acetonitrile					0.00		ug/l						
Acrolein					0.00		ug/l						
Acrylonitrile					0.00		ug/l						
Allyl Chloride					0.00		ug/l						
Bromoform					0.00		ug/l						
Carbon Disulfide					0.00		ug/l						
Carbon Tetrachloride					0.00		ug/l						
Chlorodibromomethane					0.00		ug/l						
Chloroethane					0.00		ug/l						
Chloroform					0.00		ug/l						
Chloroprene					0.00		ug/l						
Dibromomethane					0.00		ug/l						
Dichlorobromomethane					0.00		ug/l						

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QC Summary Report

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Lab. Sample ID: 9907751%

Report Date: August 02, 1999

Page 2 of 6

Sample/Parameter	Type	Batch	NOM	Sample	Qual	QC	Units	RPD %	REC %	Range	Analyst	Date	Time
Dichlorodifluoromethane						0.00	ug/l				TCL	07/23/99	1842
Ethylbenzene						0.00	ug/l						
Isobutyl Alcohol						0.00	ug/l						
Methacrylonitrile						0.00	ug/l						
Methyl Bromide						0.00	ug/l						
Methyl Chloride						0.00	ug/l						
Methyl Iodide						0.00	ug/l						
Methyl Methacrylate						0.00	ug/l						
Methylene Chloride						2.26	ug/l						
Propionitrile						0.00	ug/l						
Styrene						0.00	ug/l						
Tetrachloroethylene						0.00	ug/l						
Trichlorofluoromethane						0.00	ug/l						
Vinyl Acetate						0.00	ug/l						
Vinyl chloride						0.00	ug/l						
Xylenes (TOTAL)						0.00	ug/l						
bis(2-Chloromethyl)ether						0.00	ug/l						
cis-1,3-Dichloropropylene						0.00	ug/l						
trans-1,3-Dichloropropylene						0.00	ug/l						
trans-1,4-Dichloro-2-butene						0.00	ug/l						
QC633090		BLANK	154614								JEB	07/28/99	1500
1,1-Dichloroethylene						0.00	ug/l						
Benzene						0.00	ug/l						
Chlorobenzene						0.00	ug/l						
Toluene						0.00	ug/l						
Trichloroethylene						0.00	ug/l						
*Bromofluorobenzene							ug/l	85.4	(73.0 - 129.)				
*Dibromofluoromethane							ug/l	95.5	(66.0 - 117.)				
*Toluene-d8							ug/l	97.5	(73.0 - 122.)				
1,1,1,2-Tetrachloroethane						0.00	ug/l						
1,1,1-Trichloroethane						0.00	ug/l						
1,1,2,2-Tetrachloroethane						0.00	ug/l						
1,1,2-Trichloroethane						0.00	ug/l						
1,1-Dichloroethane						0.00	ug/l						
1,2,3-Trichloropropane						0.00	ug/l						
1,2-Dibromo-3-chloropropane						0.00	ug/l						
1,2-Dibromoethane						0.00	ug/l						
1,2-Dichlorobenzene						0.00	ug/l						
1,2-Dichloroethane						0.00	ug/l						
1,2-Dichloropropane						0.00	ug/l						

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QC Summary Report

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Lab. Sample ID: 9907751%

Report Date: August 02, 1999

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Sample/Parameter	Type	Batch	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Analyst	Date	Time
1,2-cis-Dichloroethylene						0.00	ug/l				JEB	07/28/99	1500
1,2-trans-Dichloroethylene						0.00	ug/l						
2-Butanone						0.730	ug/l						
2-Hexanone						1.63	ug/l						
4-Methyl-2-pentanone						0.540	ug/l						
Acetone						2.51	ug/l						
Acetonitrile						0.00	ug/l						
Acrolein						3.74	ug/l						
Acrylonitrile						1.39	ug/l						
Allyl Chloride						0.00	ug/l						
Bromoform						0.00	ug/l						
Carbon Disulfide						0.00	ug/l						
Carbon Tetrachloride						0.00	ug/l						
Chlorodibromomethane						0.00	ug/l						
Chloroethane						0.00	ug/l						
Chloroform						0.00	ug/l						
Chloroprene						0.00	ug/l						
Dibromomethane						0.00	ug/l						
Dichlorobromomethane						0.00	ug/l						
Dichlorodifluoromethane						0.00	ug/l						
Ethylbenzene						0.00	ug/l						
Isobutyl Alcohol						0.00	ug/l						
Methacrylonitrile						0.00	ug/l						
Methyl Bromide						0.00	ug/l						
Methyl Chloride						0.00	ug/l						
Methyl Iodide						0.00	ug/l						
Methyl Methacrylate						0.00	ug/l						
Methylene Chloride						0.00	ug/l						
Propionitrile						0.00	ug/l						
Styrene						0.00	ug/l						
Tetrachloroethylene						0.00	ug/l						
Trichlorofluoromethane						0.00	ug/l						
Vinyl Acetate						0.00	ug/l						
Vinyl chloride						0.00	ug/l						
Xylenes (TOTAL)						0.00	ug/l						
bis(2-Chloromethyl)ether						0.00	ug/l						
cis-1,3-Dichloropropylene						0.00	ug/l						
trans-1,3-Dichloropropylene						0.00	ug/l						
trans-1,4-Dichloro-2-butene						0.00	ug/l						

QC633091

BLANK 154614

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QC Summary Report

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Lab. Sample ID: 9907751%

Report Date: August 02, 1999

Page 4 of 6

Sample/Parameter	Type	Batch	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Analyst	Date	Time
1,1-Dichloroethylene						0.00	ug/l				JEB	07/28/99	1747
Benzene						0.00	ug/l				JEB	07/28/99	1747
Chlorobenzene						0.00	ug/l						
Toluene						0.00	ug/l						
Trichloroethylene						0.00	ug/l						
*Bromofluorobenzene							ug/l	98.4	(73.0 - 129.)				
*Dibromofluoromethane							ug/l	95.5	(66.0 - 117.)				
*Toluene-d8							ug/l	99.3	(73.0 - 122.)				
1,1,1,2-Tetrachloroethane						0.00	ug/l						
1,1,1-Trichloroethane						0.00	ug/l						
1,1,2,2-Tetrachloroethane						0.00	ug/l						
1,1,2-Trichloroethane						0.00	ug/l						
1,1-Dichloroethane						0.00	ug/l						
1,2,3-Trichloropropane						0.00	ug/l						
1,2-Dibromo-3-chloropropane						0.00	ug/l						
1,2-Dibromoethane						0.00	ug/l						
1,2-Dichlorobenzene						0.00	ug/l						
1,2-Dichloroethane						0.00	ug/l						
1,2-Dichloropropane						0.00	ug/l						
1,2-cis-Dichloroethylene						0.00	ug/l						
1,2-trans-Dichloroethylene						0.00	ug/l						
2-Butanone						0.00	ug/l						
2-Hexanone						0.00	ug/l						
4-Methyl-2-pentanone						0.00	ug/l						
Acetone						13.5	ug/l						
Acetonitrile						0.00	ug/l						
Acrolein						0.00	ug/l						
Acrylonitrile						0.00	ug/l						
Allyl Chloride						0.00	ug/l						
Bromotform						0.00	ug/l						
Carbon Disulfide						0.00	ug/l						
Carbon Tetrachloride						0.00	ug/l						
Chlorodibromomethane						0.00	ug/l						
Chloroethane						0.00	ug/l						
Chloroform						0.00	ug/l						
Chloroprene						0.00	ug/l						
Dibromomethane						0.00	ug/l						
Dichlorobromomethane						0.00	ug/l						
Dichlorodifluoromethane						0.00	ug/l						
Ethylbenzene						0.00	ug/l						

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QC Summary Report

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Lab. Sample ID: 9907751%

Report Date: August 02, 1999

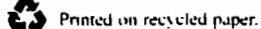
Page 5 of 6

Sample/Parameter	Type	Batch	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Analyst	Date	Time
Isobutyl Alcohol						0.00	ug/l				JEB	07/28/99	1747
Methacrylonitrile						0.00	ug/l						
Methyl Bromide						0.00	ug/l						
Methyl Chloride						0.00	ug/l						
Methyl Iodide						0.00	ug/l						
Methyl Methacrylate						0.00	ug/l						
Methylene Chloride						0.00	ug/l						
Propionitrile						0.00	ug/l						
Styrene						0.00	ug/l						
Tetrachloroethylene						0.00	ug/l						
Trichlorofluoromethane						0.00	ug/l						
Vinyl Acetate						0.00	ug/l						
Vinyl chloride						0.00	ug/l						
Xylenes (TOTAL)						0.00	ug/l						
bis(2-Chloromethyl)ether						0.00	ug/l						
cis-1,3-Dichloropropylene						0.00	ug/l						
trans-1,3-Dichloropropylene						0.00	ug/l						
trans-1,4-Dichloro-2-butene						0.00	ug/l						
QC631570	LCS	154236											
1,1-Dichloroethylene			50			61.5	ug/l		123	(70.0 - 144.)	TCL	07/23/99	1743
Benzene			50			46.8	ug/l		93.6	(74.0 - 133.)			
Chlorobenzene			50			47.1	ug/l		94.2	(78.0 - 118.)			
Toluene			50			47.4	ug/l		94.9	(79.0 - 129.)			
Trichloroethylene			50			46.0	ug/l		92.0	(69.0 - 127.)			
*Bromofluorobenzene			50			51.0	ug/l		102	(73.0 - 129.)			
*Dibromofluoromethane			50			49.5	ug/l		98.9	(66.0 - 117.)			
*Toluene-d8			50			50.5	ug/l		101	(73.0 - 122.)			
QC633484	LCS	154614											
1,1-Dichloroethylene			50			46.0	ug/l		91.9	(70.0 - 144.)	JEB	07/28/99	1432
Benzene			50			46.1	ug/l		92.1	(74.0 - 133.)			
Chlorobenzene			50			46.1	ug/l		92.1	(78.0 - 118.)			
Toluene			50			44.5	ug/l		88.9	(79.0 - 129.)			
Trichloroethylene			50			47.1	ug/l		94.3	(69.0 - 127.)			
*Bromofluorobenzene			50			37.6	ug/l		75.2	(73.0 - 129.)			
*Dibromofluoromethane			50			47.0	ug/l		94.0	(66.0 - 117.)			
*Toluene-d8			50			46.6	ug/l		93.1	(73.0 - 122.)			

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QC Summary Report

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Lab. Sample ID: 9907751%

Report Date: August 02, 1999

Page 6 of 6

Sample/Parameter	Type	Batch	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Analyst	Date	Time
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Notes:

The qualifiers in this report are defined as follows:

J indicates presence of analyte < RL (Report Limit)

U indicates presence of analyte < DL (Detect Limit)

n/a indicates that spike recovery limits do not apply when
sample concentration exceeds spike conc by a factor of 4 or more

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CHAIN OF CUSTODY RECORD

9907751.

General Engineering Laboratories, Inc.
 2040 Savage Road
 Charleston, South Carolina 29407
 P.O. Box 30712
 Charleston, South Carolina 29417
 (803) 556-8171

Client Name/Facility Name				SAMPLE ANALYSIS REQUIRED (X) - use remarks area to specify specific compounds or methods												Use F or P in the boxes to indicate whether sample was filtered and/or preserved					
Collected by/Company																<input checked="" type="checkbox"/> FILTERED <input type="checkbox"/> PRESERVED					
SAMPLE ID	DATE	TIME	WELL SOIL COMP GRAB	# OF CONTAINERS	pH, conductivity	TOC/DOC	TOX	Chloride, Fluoride, Sulfide	Nitrite/Nitrate	VOC - Specified Method Required	METALS - specify	Pesticide	Herbicide	Total Phenol	Acid Extractables	B/N Extractables	PCB's	Cyanide	Coliform - specify type		
0199SPORT02350	7/22/99	0800	X	1						X											location #1 Air
0299SPORT0235-02	7/22/99	0807	X	1						X											location #2 Air
0399SPORT0235-03			X																		location #3 Air
0399SPORT0235-04	7/22/99	0810	X	1						X											11 8.9 Air
0499SPORT0235-05	7/22/99	0814	X	1						X											H5 Air
0599SPORT0235-06	7/22/99	0818	X	1						X											#6 Air
0699SPORT0235-07	7/22/99	0822	X	1						X											#7 Air
0799SPORT0235-08	7/22/99	0824	X	1						X											#8 Air
0899SPORT0235-09	7/22/99	0830	X	1						X											#9 Air
0999SPORT0235-10	7/22/99	0835	X	1						X											#10 Air
-1099SPORT0235-11	7/22/99	0840	X	1						X											#11 Air
-1199SPORT0235-12	7/22/99	0844	X	1						X											#12 Air
-1299SPORT0235-13	7/22/99	0850	X	1						X											#13 Air
Relinquished by: <i>J.W. Mohr</i>	Date: 7/22/99	Time: 1505	Received by: <i>W.R. Hines, Jr.</i>	Relinquished by: <i>W.R. Hines, Jr.</i>	Date: 7/22/99	Time: 1523	Received by: <i>Stephanie Beale</i>														
Relinquished by: <i>Stephanie Beale</i>	Date: 7/22/99	Time: 1541	Received by lab by: <i>P. Mauer</i>	Date: 7/22/99	Time: 1541	Remarks:															

White sample collector

Yellow = file

Pink = with report

NPWC00191

Page 2 of 3

CHAIN OF CUSTODY RECORD

General Engineering Laboratories, Inc.
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 Charleston, South Carolina 29407
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SAMPLE ID	DATE	TIME	WELL SOIL COMP GRAB	# OF CONTAINERS	SAMPLE ANALYSIS REQUIRED (X) - use remarks area to specify specific compounds or methods												Remarks	
					pH, conductivity	TOC/DOC	TOX	Chloride, Fluoride, Sulfide	Nitrite/Nitrate	VOC - Specified Method required	METALS - specify	Pesticide	Herbicide	Total Phenol	Acid Extractables	B/N Extractables	PCB's	Cyanide
-13 995PORT0235-14	7/22/99	0900	0900	1					X									location #14
-14 995PORT0235-15	7/22/99	0904	0904	1					X									Air
-15 995PORT0235-16	7/22/99	0910	0910	1					X									#15 Air
-16 995PORT0235-17	7/22/99	0914	0914	1					X									#16 Air
-17 995PORT0235-18	7/22/99	0920	0920	1					X									#17 Air
-18 995PORT0235-19	7/22/99	0925	0925	1					X									#18 Air
-19 995PORT0235-20	7/22/99	0930	0930	1					X									#19 Air
-20 995PORT0235-21	7/22/99	0935	0935	1					X									#20 Air
-21 995PORT0235-22	7/22/99	0938	0938	1					X									#21 Air
-22 995PORT0235-23	7/22/99	0943	0943	1					X									#22 Air
-23 995PORT0235-24	7/22/99	0948	0948	1					X									#23 Air
-24 995PORT0235-25	7/22/99	0953	0953	1					X									#24 Air
-25 995PORT0235-26	7/22/99	0954	0954	1					X									#25 Air
																		826 Air
Relinquished by:	Date:	Time:	Received by:		Relinquished by:	Date:	Time:	Received by:		Relinquished by:	Date:	Time:	Received by:					
<i>J. L. L.</i>	7/22/99	1505	<i>W.R. Hines, Jr.</i>		<i>W.R. Hines, Jr.</i>	7/22/99	1523	<i>D. Powers</i>		<i>W.R. Hines, Jr.</i>	7/22/99	1523	<i>D. Powers</i>					
Relinquished by:	Date:	Time:	Received by lab by:		Date:	Time:	Remarks:											
<i>Sophia Better</i>	7/22/99	1541	<i>D. Powers</i>		7/22/99	1541												

White

Sample collector

Yellow = file

Pink = with report

NPWC00197

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CHAIN OF CUSTODY RECORD

General Engineering Laboratories, Inc.
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 Charleston, South Carolina 29417
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Client Name/Facility Name				SAMPLE ANALYSIS REQUIRED (x) - use remarks area to specify specific compounds or methods																
SAMPLE ID	DATE	TIME	WELL SOIL COMP GRAB	# OF CONTAINERS	pH, conductivity	TOC/DOC	TOX	Chloride, Fluoride, Sulfide	Nitrite/Nitrate	VOC - Specified Method Required	METALS - specify	Pesticide	Herbicide	Total Phenol	Acid Extractables	B/N Extractables	PCB's	Cyanide	Coliform - specify type	Remarks
20995P0010235-27	7/22/99	1007	1000	1						X								Location # 1 H2O		
21995P0010235-28	7/22/99	1003		1						X								# 4 H2O		
22995P0010235-29	7/22/99	1007		1						X								# 8 H2O		
23995P0010235-30	7/22/99	1009		1						X								# 12 H2O		
24995P0010235-31	7/22/99	1015		1						X								# 14 H2O		
25995P0010235-32	7/22/99	1020		1						X								# 15 H2O		
26995P0010235-33	7/22/99	1025		1						X								# 18 H2O		
27995P0010235-34	7/22/99	1030		1						X								# 20 H2O		
28995P0010235-35	7/22/99	1035		1						X								# 23 H2O		
29995P0010235-36	7/22/99	1040		1						X								# 25 H2O		
30995P0010235-37	7/22/99	1000		3						X								# 26 H2O TRIP BLANK		
Relinquished by:				Date: 7/22/99 1005	Time:	Received by: W.R. Hines, Jr.	Relinquished by: W.R. Hines, Jr. Date: 7/24/99 1523 Time: Received by: D. Lepreche, Pordochin													
Relinquished by: D. Lepreche, Pordochin				Date: 7/22/99 1541	Time:	Received by lab #: P. A. Mauer	Date: 7/22/99 1541	Time:	Remarks:											

White : simple collector

Yellow = file

Pink = with rep rt



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Meeting today's needs with a vision for tomorrow.

Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 1 of 3

Sample ID : 99SPCRT0235-01
Lab ID : 9907751-01
Matrix : GroundH₂O
Date Collected : 07/22/99
Date Received : 07/22/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/23/99	1912	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropene	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	U	ND	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	U	ND	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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9907751-01



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1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 2 of 3

Sample ID		: 99SPORT0235-01									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/23/99	1912	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		1.89	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	93.8	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	102.	(66.0 - 117.)
oluene-d8	APP 9 VOA-8260B	98.0	(73.0 - 122.)

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SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 3 of 3

Sample ID : 99SPORT0235-01

Surrogate Recovery	Test	Percent %	Acceptable Limits
--------------------	------	-----------	-------------------

M = Method	Method-Description
------------	--------------------

M 1	EPA 8260B
-----	-----------

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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standard operating procedures. Please direct
any questions to your Project Manager, Elise Hanson at 843-556-8171.

Elise Hanson
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SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 1 of 3

Sample ID	: 99SPORT0235-02
Lab ID	: 9907751-02
Matrix	: GroundH ₂ O
Date Collected	: 07/22/99
Date Received	: 07/22/99
Priority	: Routine
Collector	: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/23/99	2012	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	U	ND	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	U	ND	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Page 2 of 3

Sample ID		: 99SPORT0235-02									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/23/99	2012	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Méthyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	J	1.45	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		2.93	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	94.9	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	102.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	97.3	(73.0 - 122.)

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Page 3 of 3

Sample ID : 99SPORT0235-02			
Surrogate Recovery	Test	Percent %	Acceptable Limits
M = Method			Method-Description
M 1			EPA 8260B

Notes:

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Project Description: SUPSHIP-Portsmouth Detachment

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Page 1 of 3

Sample ID	:	99SPORT0235-04
Lab ID	:	9907751-03
Matrix	:	GroundH2O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/23/99	2111	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	J	4.72	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	J	2.72	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	U	ND	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

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Report Date: August 02, 1999

Page 2 of 3

Sample ID		99SPORT0235-04									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/23/99	2111	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	J	2.51	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		49.6	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	90.3	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	93.4	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	95.3	(73.0 - 122.)

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Page 3 of 3

Sample ID	: 99SPORT0235-04		
Surrogate Recovery	Test	Percent %	Acceptable Limits

M = Method	Method-Description
M 1	EPA 8260B

Notes:

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Project Description: SUPSHIP-Portsmouth Detachment

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Sample ID	99SPORT0235-05
Lab ID	9907751-37
Matrix	GroundH ₂ O
Date Collected	07/22/99
Date Received	07/22/99
Priority	Routine
Collector	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1757	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropene	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	J	3.77	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	U	ND	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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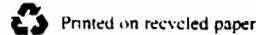
Sample ID		99SPORT0235-05									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chloroibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1757	154236	1
Chlorotorm	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
sobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	U	ND	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	96.3	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	102.	(66.0 - 117.)
Toluene-a8	APP 9 VOA-8260B	96.7	(73.0 - 122.)

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

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Sample ID	99SPORT0235-05			
Surrogate Recovery	Test	Percent %	Acceptable Limits	
M = Method			Method-Description	
M 1	EPA 8260B			

Notes:

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N/D indicates that the analyte was not detected at a concentration greater than the detection limit.

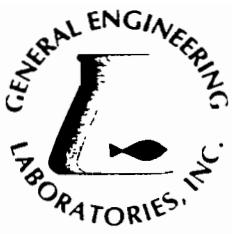
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Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 1 of 3

Sample ID	:	99SPORT0235-06
Lab ID	:	9907751-05
Matrix	:	GroundH ₂ O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/23/99	2211	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	J	4.16	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	J	2.64	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Page 2 of 3

Sample ID		: 99SPORT0235-06									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/23/99	2211	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		1.04	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

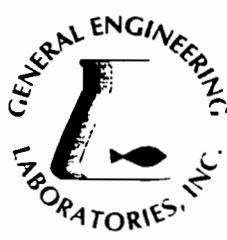
Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	95.1	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	102.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	97.9	(73.0 - 122.)

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

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Page 3 of 3

Sample ID : 99SPORT0235-06

Surrogate Recovery	Test	Percent%	Acceptable Limits
--------------------	------	----------	-------------------

M = Method	Method-Description
------------	--------------------

M 1	EPA 8260B
-----	-----------

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed
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standard operating procedures. Please direct
any questions to your Project Manager, Elise Hanson at 843-556-8171.

Elise Hanson
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Page 1 of 3

Sample ID : 99SPORT0235-07
Lab ID : 9907751-06
Matrix : GroundH2O
Date Collected : 07/22/99
Date Received : 07/22/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/23/99	2310	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	J	3.97	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	J	2.79	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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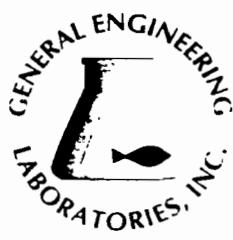
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Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/23/99	2310	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	U	ND	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	94.6	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	99.6	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	96.3	(73.0 - 122.)

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Page 3 of 3

Sample ID	: 99SPORT0235-07		
Surrogate Recovery	Test	Percent %	Acceptable Limits
M = Method			Method-Description
M 1			EPA 8260B

Notes:

The qualifiers in this report are defined as follows:

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J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

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* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

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Sample ID	:	99SPORT0235-08
Lab ID	:	9907751-07
Matrix	:	GroundH2O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0009	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone		6.05	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	J	3.22	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 2 of 3

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0009	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		1.26	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	95.0	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	101.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	96.8	(73.0 - 122.)

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 3 of 3

Sample ID	: 99SPORT0235-08		
Surrogate Recovery	Test	Percent %	Acceptable Limits
M = Method			Method-Description
M 1		EPA 8260B	

Notes:

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

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Sample ID	:	99SPORT0235-09
Lab ID	:	9907751-08
Matrix	:	GroundH ₂ O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0108	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	U	ND	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	U	ND	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 2 of 3

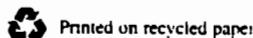
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0108	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	U	ND	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	99.2	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	103.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	106.	(73.0 - 122.)

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Sample ID : 99SPORT0235-09

Surrogate Recovery	Test	Percent %	Acceptable Limits
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M = Method	Method-Description
M 1	EPA 8260B

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

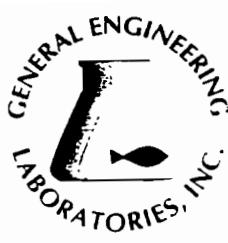
U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed
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standard operating procedures. Please direct
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Elise Hanson

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 1 of 3

Sample ID	:	99SPORT0235-10
Lab ID	:	9907751-09
Matrix	:	GroundH2O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0207	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone		5.15	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	J	3.62	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

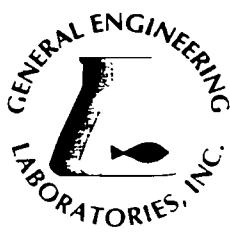
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Report Date: August 02, 1999

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Sample ID : 99SPORT0235-10

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0207	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	J	2.23	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	U	ND	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	97.9	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	104.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	99.4	(73.0 - 122.)

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Page 3 of 3

Sample ID : 99SPORT0235-10

Surrogate Recovery	Test	Percent %	Acceptable Limits
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M = Method	Method-Description
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M 1	EPA 8260B
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Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed
in accordance with General Engineering Laboratories
standard operating procedures. Please direct
any questions to your Project Manager, Elise Hanson at 843-556-8171.

E. Hanson

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Project Description: SUPSHIP-Portsmouth Detachment

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Page 1 of 3

Sample ID : 99SPORT0235-11
Lab ID : 9907751-10
Matrix : GroundH₂O
Date Collected : 07/22/99
Date Received : 07/22/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0307	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone		8.66	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	U	ND	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

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Report Date: August 02, 1999

Page 2 of 3

Sample ID		: 99SPORT0235-11									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0307	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		265	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	101.	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	102.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	98.3	(73.0 - 122.)

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 3 of 3

Sample ID : 99SPORT0235-11

Surrogate Recovery	Test	Percent %	Acceptable Limits
<hr/>			
M = Method			Method-Description
M 1			EPA 8260B

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

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Report Date: August 02, 1999

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Sample ID : 99SPORT0235-12
Lab ID : 9907751-11
Matrix : GroundH2O
Date Collected : 07/22/99
Date Received : 07/22/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0406	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone		8.48	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	J	3.51	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 2 of 3

Sample ID : 99SPORT0235-12

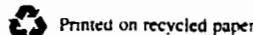
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0406	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		77.8	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	97.5	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	101.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	99.2	(73.0 - 122.)

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Page 3 of 3

Sample ID : 99SPORT0235-12

Surrogate Recovery	Test	Percent %	Acceptable Limits
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M = Method	Method-Description
------------	--------------------

M 1	EPA 8260B
-----	-----------

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed
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Elise Hanson
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Page 1 of 3

Sample ID : 99SPORT0235-13
Lab ID : 9907751-12
Matrix : GroundH2O
Date Collected : 07/22/99
Date Received : 07/22/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0505	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone		11.2	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	J	3.00	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Page 2 of 3

Sample ID : 99SPORT0235-13

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0505	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	J	0.600	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	95.2	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	100.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	96.8	(73.0 - 122.)

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cc: NPWC00197

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Page 3 of 3

Sample ID : 99SPORT0235-13			
Surrogate Recovery	Test	Percent %	Acceptable Limits
M 1	EPA 8260B		

M = Method

Method-Description

M 1 EPA 8260B

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

This data report has been prepared and reviewed
in accordance with General Engineering Laboratories
standard operating procedures. Please direct
any questions to your Project Manager, Elise Hanson at 843-556-8171.

Elise Hanson
Reviewed By



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Project Description: SUPSHIP-Portsmouth Detachment

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Report Date: August 02, 1999

Page 1 of 3

Sample ID	: 99SPORT0235-14
Lab ID	: 9907751-13
Matrix	: GroundH2O
Date Collected	: 07/22/99
Date Received	: 07/22/99
Priority	: Routine
Collector	: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0604	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone		15.7	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	J	3.66	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0604	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	U	ND	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

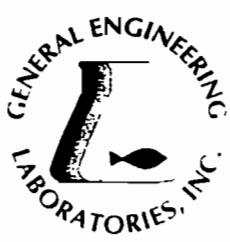
Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	88.3	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	93.2	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	90.8	(73.0 - 122.)

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 3 of 3

Sample ID : 99SPORT0235-14

Surrogate Recovery	Test	Percent %	Acceptable Limits
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M = Method	Method-Description
------------	--------------------

M 1	EPA 8260B
-----	-----------

Notes:

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

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Sample ID : 99SPORT0235-15
Lab ID : 9907751-14
Matrix : GroundH2O
Date Collected : 07/22/99
Date Received : 07/22/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0703	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	U	ND	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	J	2.90	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 2 of 3

Sample ID		: 99SPORT0235-15									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0703	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	J	0.570	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

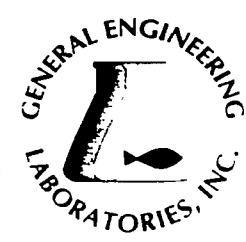
Surrogate Recovery	Test	Percent%	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	95.3	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	100.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	97.6	(73.0 - 122.)

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Project Description: SUPSHIP-Portsmouth Detachment

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Report Date: August 02, 1999

Page 3 of 3

Sample ID : 99SPORT0235-15

Surrogate Recovery	Test	Percent %	Acceptable Limits
--------------------	------	-----------	-------------------

M = Method	Method-Description
------------	--------------------

M 1	EPA 8260B
-----	-----------

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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Elise Hanson
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Project Description: SUPSHIP-Portsmouth Detachment

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Page 1 of 3

Sample ID : 99SPORT0235-16
Lab ID : 9907751-15
Matrix : GroundH2O
Date Collected : 07/22/99
Date Received : 07/22/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0802	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene		5.35	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone		5.84	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	J	3.22	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Page 2 of 3

Sample ID : 99SPORT0235-16

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0802	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	U	ND	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent%	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	96.8	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	99.0	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	99.0	(73.0 - 122.)

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Page 3 of 3

Sample ID : 99SPORT0235-16

Surrogate Recovery	Test	Percent %	Acceptable Limits
<hr/>			
M = Method			Method-Description

M 1 EPA 8260B

Notes:

The qualifiers in this report are defined as follows:

ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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E. Hanson
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Page 1 of 3

Sample ID	:	99SPORT0235-17
Lab ID	:	9907751-16
Matrix	:	GroundH ₂ O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0901	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	J	4.09	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	J	2.70	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Project Description: SUPSHIP-Portsmouth Detachment

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Page 2 of 3

Sample ID : 99SPORT0235-17

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	0901	154236	I
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	U	ND	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	95.9	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	101.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	98.7	(73.0 - 122.)

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Project Description: SUPSHIP-Portsmouth Detachment

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Report Date: August 02, 1999

Page 3 of 3

Sample ID : 99SPORT0235-17			
Surrogate Recovery	Test	Percent %	Acceptable Limits
M 1	EPA 8260B		

M = Method

Method-Description

M 1 EPA 8260B

Notes:

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Project Description: SUPSHIP-Portsmouth Detachment

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Report Date: August 02, 1999

Page 1 of 3

Sample ID	:	99SPORT0235-18
Lab ID	:	9907751-17
Matrix	:	GroundH ₂ O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1001	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	J	0.770	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone		5.59	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	J	3.95	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 2 of 3

Sample ID : 99SPORT0235-18

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1001	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene	U	ND	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	101.	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	105.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	102.	(73.0 - 122.)

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Project Description: SUPSHIP-Portsmouth Detachment

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Page 3 of 3

Sample ID : 99SPORT0235-18

Surrogate Recovery	Test	Percent %	Acceptable Limits
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M = Method	Method-Description
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M 1	EPA 8260B
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Notes:

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ND indicates that the analyte was not detected at a concentration greater than the detection limit.

J indicates presence of analyte at a concentration less than the reporting limit (RL) and greater than the detection limit (DL).

U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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Elise Hanson
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Page 1 of 3

Sample ID : 99SPORT0235-19
Lab ID : 9907751-18
Matrix : GroundH2O
Date Collected : 07/22/99
Date Received : 07/22/99
Priority : Routine
Collector : Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1100	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone		6.39	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	U	ND	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Sample ID : 99SPORT0235-19

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1100	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		32.3	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	95.9	(73.0 - 129.)
1-bromofluoromethane	APP 9 VOA-8260B	99.9	(66.0 - 117.)
1,1-diene-d8	APP 9 VOA-8260B	96.0	(73.0 - 122.)

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Sample ID : 99SPORT0235-19

Surrogate Recovery	Test	Percent %	Acceptable Limits
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M = Method	Method-Description
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M 1	EPA 8260B
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Notes:

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U indicates that the analyte was not detected at a concentration greater than the detection limit.

* indicates that a quality control analyte recovery is outside of specified acceptance criteria.

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Elise Hanson
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Sample ID	:	99SPORT0235-20
Lab ID	:	9907751-19
Matrix	:	GroundH ₂ O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1159	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone		24.1	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	U	ND	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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Contact: Mr. Bill Hiers

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Page 2 of 3

Sample ID		: 99SPORT0235-20									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1159	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		107	0.500	1.00	ug/l	1.0					
Trichloroethylene	U	ND	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	96.7	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	101.	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	97.4	(73.0 - 122.)

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Page 3 of 3

Sample ID	: 99SPORT0235-20		
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Surrogate Recovery	Test	Percent %	Acceptable Limits
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M = Method	Method-Description
------------	--------------------

M 1	EPA 8260B
-----	-----------

Notes:

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E. Hamm
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Sample ID	:	99SPORT0235-21
Lab ID	:	9907751-20
Matrix	:	GroundH ₂ O
Date Collected	:	07/22/99
Date Received	:	07/22/99
Priority	:	Routine
Collector	:	Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Volatile Organics											
<i>Appendix IX Volatiles - 55 items</i>											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1259	154236	1
1,1,1-Trichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,1,2,2-Tetrachloroethane	U	ND	0.500	1.00	ug/l	1.0					
1,1,2-Trichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethane	U	ND	0.400	1.00	ug/l	1.0					
1,1-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
1,2,3-Trichloropropane	U	ND	0.500	1.00	ug/l	1.0					
1,2-Dibromo-3-chloropropane	U	ND	0.600	1.00	ug/l	1.0					
1,2-Dibromoethane	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichlorobenzene	U	ND	0.400	1.00	ug/l	1.0					
1,2-Dichloroethane	U	ND	0.200	1.00	ug/l	1.0					
1,2-Dichloropropane	U	ND	0.200	1.00	ug/l	1.0					
1,2-cis-Dichloroethylene		3.19	0.700	1.00	ug/l	1.0					
1,2-trans-Dichloroethylene	U	ND	0.700	1.00	ug/l	1.0					
2-Butanone	U	ND	5.90	10.0	ug/l	1.0					
2-Hexanone	U	ND	3.20	5.00	ug/l	1.0					
4-Methyl-2-pentanone	U	ND	1.60	5.00	ug/l	1.0					
Acetone	J	4.98	3.70	5.00	ug/l	1.0					
Acetonitrile	U	ND	15.6	25.0	ug/l	1.0					
Acrolein	U	ND	8.90	10.0	ug/l	1.0					
Acrylonitrile	U	ND	8.20	10.0	ug/l	1.0					
Allyl Chloride	U	ND	2.10	5.00	ug/l	1.0					
Benzene	U	ND	0.300	1.00	ug/l	1.0					
Bromoform	U	ND	0.400	1.00	ug/l	1.0					
Carbon Disulfide	U	ND	1.80	5.00	ug/l	1.0					
Carbon Tetrachloride	U	ND	0.200	1.00	ug/l	1.0					
Chlorobenzene	U	ND	0.300	1.00	ug/l	1.0					

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9907751-20



GENERAL ENGINEERING LABORATORIES

Meeting today's needs with a vision for tomorrow

Client: Supervisor of Ship Building & Conversion
SUPSHIP-Portsmouth Detachment-Env.
1899 North Hobson Ave.
North Charleston, South Carolina 29405-2106

Contact: Mr. Bill Hiers

Project Description: SUPSHIP-Portsmouth Detachment

cc: NPWC00197

Report Date: August 02, 1999

Page 2 of 3

Sample ID		: 99SPORT0235-21									
Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	M
Chlorodibromomethane	U	ND	0.300	1.00	ug/l	1.0					
Chloroethane	U	ND	0.300	1.00	ug/l	1.0	TCL	07/24/99	1259	154236	1
Chloroform	U	ND	0.700	1.00	ug/l	1.0					
Chloroprene	U	ND	0.100	20.0	ug/l	1.0					
Dibromomethane	U	ND	0.200	1.00	ug/l	1.0					
Dichlorobromomethane	U	ND	0.400	1.00	ug/l	1.0					
Dichlorodifluoromethane	U	ND	1.20	5.00	ug/l	1.0					
Ethylbenzene	U	ND	0.300	1.00	ug/l	1.0					
Isobutyl Alcohol	U	ND	36.0	50.0	ug/l	1.0					
Methacrylonitrile	U	ND	3.80	5.00	ug/l	1.0					
Methyl Bromide	U	ND	0.300	1.00	ug/l	1.0					
Methyl Chloride	U	ND	0.200	1.00	ug/l	1.0					
Methyl Iodide	U	ND	5.20	10.0	ug/l	1.0					
Methyl Methacrylate	U	ND	3.90	5.00	ug/l	1.0					
Methylene Chloride	U	ND	1.20	5.00	ug/l	1.0					
Propionitrile	U	ND	2.60	10.0	ug/l	1.0					
Styrene	U	ND	0.200	1.00	ug/l	1.0					
Tetrachloroethylene	U	ND	0.700	1.00	ug/l	1.0					
Toluene		36.1	0.500	1.00	ug/l	1.0					
Trichloroethylene	J	0.930	0.600	1.00	ug/l	1.0					
Trichlorofluoromethane	U	ND	1.70	5.00	ug/l	1.0					
Vinyl Acetate	U	ND	1.80	5.00	ug/l	1.0					
Vinyl chloride	U	ND	0.400	1.00	ug/l	1.0					
Xylenes (TOTAL)	U	ND	1.10	2.00	ug/l	1.0					
bis(2-Chloromethyl)ether	U	ND	3.70	10.0	ug/l	1.0					
cis-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,3-Dichloropropylene	U	ND	0.300	1.00	ug/l	1.0					
trans-1,4-Dichloro-2-butene	U	ND	2.80	5.00	ug/l	1.0					

Surrogate Recovery	Test	Percent %	Acceptable Limits
Bromofluorobenzene	APP 9 VOA-8260B	94.2	(73.0 - 129.)
Dibromofluoromethane	APP 9 VOA-8260B	99.7	(66.0 - 117.)
Toluene-d8	APP 9 VOA-8260B	95.5	(73.0 - 122.)

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